FACT SHEET

United States Environmental Protection Agency, Region 10
1200 Sixth Avenue, OW-133
Seattle, Washington 98101
(206) 553-1760

Proposed reissuance of a general National Pollutant Discharge Elimination System (NPDES) permit to discharge pollutants pursuant to the provisions of the Clean Water Act, 33 U.S.C. § 1251 et seq. for

SEAFOOD PROCESSORS IN ALASKA.

This fact sheet includes (a) the tentative determination of the Environmental Protection Agency (EPA) to reissue general NPDES permit no. AK-G52-0000, (b) information on public comment, public hearings and appeal, (c) the description of the industry and its discharges, and (d) other conditions and requirements.

Persons wishing to comment on the tentative requirements and conditions contained in the proposed general permit may do so before the expiration date of the public notice. EPA appreciates both supportive and critical comments in this public review and comment period. All persons, including applicants, who believe any condition of a draft permit is inappropriate or that EPA's tentative decision to prepare this draft permit is inappropriate, must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close the public comment period. Any supporting materials which are submitted shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record or are a generally available document or reference. All written comments should be submitted or presented to EPA as described in the public comments section of the attached public notice.

After the expiration date of the public notice, the Director, Office of Water, EPA Region 10, will make a final determination with respect to reissuance of the general permit. EPA is working within a schedule such that permit should become effective on August 5, 2000.

Within 180 days following the service of notice of EPA's final permit decision, any person who filed comments on the draft permit or participated in the public hearing may petition the Court of Appeals to review any condition of the permit decision (40 CFR § 124.19). Persons affected by a general permit may not challenge the conditions of the Permit as a right of further EPA proceedings.

The draft general NPDES permit and fact sheet are on file and may be inspected and copied at the above address any time between 8:30 a.m. and 4:00 P.M., Monday through

Friday. Copies and other information may be requested by writing to EPA at the above address to the attention of Alaska Seafood Permit Team, or by calling Florence Carroll at (206) 553-1760, Burney Hill at (206) 553-1761, or Audrey Washington (206) 553-0523.

This material is also available for inspection and copying at the following federal and State offices in Alaska:

USEPA Alaska Operations Office
Federal Building, Room 537
222 West 7th Avenue
Anchorage, Alaska 99513-7588
phone: (907) 271-5083

USEPA Alaska Operations Office
410 Willoughby Avenue, Suite 100
Juneau, Alaska 99801
phone: (907) 586-7619

ADEC Anchorage Office
Air and Water Quality Program
555 Cordova Street
Anchorage, Alaska 99501
phone: (907) 269-7634

ADEC Central Headquarters
Air and Water Quality Program
410 Willoughby Avenue, Suite 105
Juneau, Alaska 99801
phone: (907) 465-5300

ADEC Fairbanks Office
Air and Water Quality Program
610 University Avenue
Fairbanks, Alaska 99709
phone: (907) 451-2360

ADEC Ketchikan District Office
540 Water Street, Suite 203
Ketchikan, Alaska 99901
phone: (907) 225-6200

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I. GENERAL NPDES PERMIT

A. What is the basis for issuance of a general permit

Section 301(a) of the Clean Water Act (CWA, or the Act) provides that the discharge of pollutants to surface waters of the United States is unlawful except in accordance with a National Pollutant Discharge Elimination System (NPDES) permit. EPA's regulations authorize the issuance of general NPDES permits to categories of discharges when a number of point sources discharges:

- involve the same or substantially similar types of operations;
- discharge the same types of wastes;
- are located within a geographic area;
- require the same effluent limitations;
- require the same operating conditions;
- require the same or similar monitoring requirements; and
- in the opinion of EPA, are more appropriately controlled under a general permit than under individual permits [40 CFR § 122.28].

EPA has determined that the owners and operators of seafood processing facilities described in Part I of the draft general NPDES permit AK-G52-0000 (the Permit) are authorized to discharge seafood processing wastes and the concomitant wastes set out in Part II of the Permit to waters of the United States as described in Part III of the Permit, in accordance with effluent limitations, monitoring requirements and other conditions set forth in the Permit.

As provided in 40 CFR §§ 124.8 and 124.56, this fact sheet briefly describes the facilities, discharges and receiving waters covered by the Permit. It also sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the Permit and its requirements.

EPA has developed the "Ocean discharge criteria evaluation for the general NPDES permit for Alaskan seafood processors" (hereafter, the "Seafood ODCE") to provide more extensive details on certain aspects of Alaskan seafood processors, their effluent discharges and the waters receiving these pollutants (EPA and Tetra Tech 1994a). EPA contracted Tetra Tech to expand model

simulations of the deposition of offal discharges on the seafloor in support of permit limits (Tetra Tech 1996). EPA also developed a technical support document to address the issue of potential effects from pollutant discharges permitted under this general NPDES permit on threatened and endangered species (EPA and Tetra Tech 1994b). These technical support documents provide a significant expansion of this fact sheet as to the scientific basis for the Permit.

Coverage under the Permit will expire five (5) years from the date of issuance.

Like individual NPDES permits, a violation of a condition contained in a general NPDES permit constitutes a violation of the Act and subjects the permittee to the penalties specified in CWA § 309.

B. How to apply for coverage under the general permit

A Notice of Intent (NOI) to be covered under the Permit is required [40 CFR § 122.28(b)(2)(i)]. The requirements are outlined in Part IV of the Permit. A permittee seeking authorization to discharge under the Permit should submit a timely NOI to EPA at least 60 days prior to the desired date of coverage. This time period will allow EPA adequate time to review the application, consult with the applicant, the State and other parties as appropriate, and inform the applicant of its permit determination. An NOI shall include information on the facility, its owners and operators, its process and discharges, and the receiving water in acccordance with Part IV.C of the Permit.

C. What are the requirements of an individual permit

1. How will an individual permit differ from the general permit?

   EPA has determined that the general NPDES permit for Alaskan seafood processing facilities will contain the minimum limitations and requirements for authorization to discharge pollutants from these types of operations. These minimum requirements include best management practices, technology-based effluent limits, water quality-based limits, monitoring of the receiving water, seafloor and shoreline where feasible and appropriate, and reporting of production, discharges and monitoring.

   Individual NPDES permits for Alaskan seafood processing facilities will require at least these minimum permit requirements. Thus, individual permits will require at least a best management practices plan supported by a materials accounting, technology-based effluent limits, site-specific water

quality limits on residues and other pollutant discharges, site-specific monitoring of the receiving water, seafloor and shoreline, and reporting of production, discharges and monitoring.

2. When will a general permittee be required to apply for an individual permit [40 CFR § 122.28(b)(3)]

   EPA may require any discharger applying for or covered by a general permit to apply for and obtain an individual permit. In addition, any interested person may petition EPA to take this action. EPA may consider the issuance of individual permits when:

   a. The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

   b. The discharger is not in compliance with the terms and conditions of the general permit;

   c. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

   d. Effluent limitations guidelines are subsequently promulgated for the point sources covered by the general permit;

   e. A Water Quality Management Plan containing requirements applicable to such point sources is approved; or

   f. The requirements in Part I.A of the Permit are not met.

3. How to apply for authorization to discharge under an individual permit [40 CFR § 122.28(b)(3)(G)(iii)]

   Owners or operators covered by a general permit may be excepted from such coverage by applying to EPA for an individual permit. The owner or operator shall submit an application to EPA no later than 60 days after the effective date of the Permit. This application shall include NPDES permit application Forms 1 and 2C, together with the same information as in Part IV.C of this Permit and, if applicable, Part IV.D of this Permit. If the proposed discharge will be to any of the areas excluded from coverage as protected water resources and special habitats, at-risk water resources and waterbodies, degraded waterbodies, and areas covered by other general

NPDES permits as listed in Part III this Permit, the application for an individual permit must include information requested in support of a request for a waiver, Part IV.D of this Permit.

II. WHAT FACILITIES, POLLUTANT DISCHARGES AND RECEIVING WATERS ARE COVERED BY THE GENERAL PERMIT

A. Facilities covered by the Permit

EPA is proposing to reissue a general NPDES permit for seafood processing facilities in Alaska. The Permit will authorize discharges from facilities engaged in the processing of fresh, frozen, canned, smoked, salted or pickled seafoods to surface waters of the United States within and continuous to the State of Alaska (the "receiving waters" or "waters of the United States"). The Permit will also authorize discharges from offshore facilities engaged in the processing of seafood paste, mince or meal to waters of the United States more than one (1) nautical mile from the shore of the State of Alaska at mean lower low water (MLLW).

Currently, there were approximately 250 seafood processing facilities permitted under NPDES to discharge effluents in Alaska, of which roughly 80 are onshore facilities and 170 are floating facilities. Seafood processors are generally differentiated from other food processing industries in the Standard Industrial Classification Manual (1987) as "canned and cured fish and seafoods" (SIC no. 2091), "prepared fresh and frozen fish and seafoods" (SIC no. 2092), "animal and marine fats and oils" (SIC no. 2077) and "food preparations, not elsewhere classified" (SIC no. 2099). These facilities may process any of a large number of species of fish and marine invertebrates. A survey of the Alaskan seafood catch indicates that pollock, salmonids, Pacific cod, flatfishes, shellfish and herring comprise the bulk of the biomass processed by Alaska's seafood industry (Tetra Tech 1992). Seafood processors authorized under the current general permit individually discharge from 30,000 to over ten million pounds of waste solids annually; more than half of the facilities discharge less than the estimated median discharge of two million pounds per year. Shore-based seafood processors extend from Dixon Entrance in SE Alaska to Atka in the western Aleutian Islands to Kotzebue Sound in northern Alaska, while mobile floating processors may be found in nearshore and offshore waters across this same range (Figure 1).

Detailed information on the nature of the seafood processing industry and the fisheries which supply it with raw product is provided in the "Seafood ODCE" (EPA and Tetra Tech 1994a) and documents referenced therein.

B. Facilities not authorized by the Permit

The Permit does not authorize discharges resulting from seafood processors producing seafood paste, mince or meal and discharging associate process wastes to receiving waters within one (1) nautical mile of the Alaskan shore at MLLW. Applications for individual NPDES permits will be accepted from these facilities and assigned a high priority for issuance.

The Permit does not require authorization for discharges of seafood processing wastes by operations discharging less than one thousand (1,000) pounds of seafood waste per day and less than fifteen tons (30,000 lbs) of seafood waste per year. These facilities may apply for and obtain coverage under this Permit.

C. Discharges covered by the Permit

The following effluents are covered by the Permit. Detailed information on the nature of the seafood processor effluents is provided in the "Seafood ODCE" (EPA and Tetra Tech 1994a).

1. Seafood process wastes are authorized for discharge under the Permit. The major pollutants of concern include residues, biochemical oxygen demand, non-petroleum oil and grease, and nutrients. These pollutants come from the waste solids (shell, bones, skin, scales, flesh and organs), blood, body fluids, slime, oils and fats from cooking and rendering operations. Ammonia may be present intermittently in negligible amounts. The color, turbidity, pH and temperature of process waste effluents may also differ from that of the receiving water.

2. Process disinfectants are authorized for discharge under the Permit. Sodium hypochlorite and ammonium chlorides are the primary disinfectants used in the control of microbial contamination of seafood processing equipment and containers. As a result of the periodic use of these disinfectants to sanitize equipment, free chlorine may be present in residual amounts. In addition, iodine disinfectants may be applied alternately.

3. Sanitary and domestic wastes and gray wastewater are authorized for discharge under the Permit. The kitchen, shower, sink and toilet effluents include TSS, BOD, fecal coliform bacteria (FC), and non-petroleum oil and grease. The temperature and pH of sanitary and domestic wastes may also differ from that of the receiving water.

4. Other wastewaters, including cooling water, boiler water, freshwater pressure relief water, refrigeration condensate, water used to transfer seafood to the facility, and live tank water, are authorized for discharge under

the Permit. These other wastewater effluents include TSS, BOD, and non-petroleum oil and grease. The temperature and pH of these effluents may also differ from that of the receiving water.

D. Discharges not authorized by the Permit

The Permit does not authorize any pollutants which are not expressly authorized in the Permit. This includes, but is not limited to, petroleum hydrocarbons and toxic pollutants listed in 40 CFR § 401.15.

E. Receiving waters covered by the Permit

The Permit authorizes discharges of specified pollutants to the waters of the United States except those excluded from coverage as protected, special, at-risk or degraded water resources as described in Part II.F below. In general the Permit authorizes seafood processing discharges to marine waters and rivers. Mixing zones of one hundred (100) foot radius are provided for discharges of dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine. Zones of deposit of one (1) acre are provided for settleable solid seafood processing waste residues.

F. Receiving waters not authorized by the Permit

Discharges are explicitly not authorized under the Permit to receiving waters which have been identified as protected, special, at-risk or degraded water resources. EPA's assessment of the risk of degradation to resource values and uses in these waters is that the pollutants discharged should be diluted to ambient background concentrations and that new or additional mixing zones and zones of deposit are inappropriate.

Seafood processors discharge wastewaters that contain significant quantities and concentrations of BOD, TSS and other solid residues, oil and grease and nutrients. Potential degradation may affect the water column, seafloor or shore directly or indirectly through burial and smothering, putrification and decay, deoxygenation, nutrient loading and eutrophication, alteration of habitats, aquatic communities and food webs, the promotion of noxious or toxic phytoplankton or bacteria, or other ecological mechanisms (EPA and Tetra Tech 1994a).

The Permit requires that process waste solids shall be ground to 0.5 inch or less prior to discharge; no additional technology-based treatment is required of process wastewaters.

Water quality-based limitations require site-specific analyses of the dispersive and assimilative capacities of a particular receiving water for a particular quantity and quality of a pollutant. Adequate dilution is important to the success of a general NPDES permit in ensuring water quality and protecting the environment in receiving waters. Dilution depends upon the physical and hydrodynamic characteristics of a receiving water. EPA estimates that discharged effluents will be diluted approximately 30:1 at the edge of a circular mixing zone of 100 ft under the worst-case scenarios allowable under the Permit. Dilution of BOD and TSS to background levels to ambient levels under worst-case conditions would be assured within a distance of one (1) nautical mile from the point of discharge.

Furthermore, the evaluation of effluent limitations required to protect water resource quality for marine waters under CWA § 403 involves due consideration of the character and status of receiving waters as an ecosystem and a natural resource with aesthetic, recreational, scientific and economic values [40 CFR Part 125, subpart M]. The scientific, social and economic considerations are substantial (EPA and Tetra Tech 1994a). If EPA has insufficient information to determine that there will be no unreasonable degradation of the marine environment and finds that reasonable alternatives to discharges do exist (e.g., barging of effluents as per EPA 1975 et al.), then there shall be no discharge of pollutants into the environment [40 CFR § 125.123(c)].

EPA formed a work group for the purpose of consulting with State and federal managers of fish and wildlife, public lands and the environment during 1994 concerning areas meriting exclusion from coverage under the Permit. In a teleconference on March 30, 1994, the work group reached concensus on the excluded areas included in the 1995 Permit and continued within the present 2000 Permit.

It is rational and prudent for EPA to exclude from coverage by a general NPDES permit receiving waters which are protected, special, at-risk or degraded. It is reasonable and responsible of the permitted industry to respect and avoid discharging pollutants to these excluded areas in compliance with the requirements of the Permit.

In consideration of the industry's interest in operating and discharging in some of these areas, EPA has made allowance for the submittal of a request for a waiver under Part III.E of the Permit. The applicant's burden of proof for supporting such a request is substantial. Essentially, an applicant for a waiver to discharge in the following excluded areas must establish a compelling need, such as historical permanent siting, and must demonstrate that the proposed discharge will not degrade or further degrade water resource quality.

A seafood processor wishing to apply for authorization to discharge in the "excluded areas" may choose to apply for an individual NPDES permit. As above, the applicant's burden of proof for supporting such a request is substantial.

The areas excluded from coverage under the Permit include the following protected, special, at-risk or degraded water resources and waterbodies.

1. Protected water resources and special habitats.

    a. Waters within one (1) nautical mile of the boundary of a State Game Sanctuary, Game Refuge or Critical Habitat are excluded from coverage by the Permit.

        The Alaska State Legislature has classified certain areas, designated as a sanctuary, refuge or critical habitat, as being essential to the protection of fish and wildlife habitat [5 AAC Part 95]. The three State sanctuaries are Walrus Islands, McNeil River and Stan Price. The twelve State refuges include Cape Newenham, Izembek, Trading Bay, Susitna Flats, Anchorage Coastal, Goose Bay, Palmer Hay Flats, Minto Flats, Creamer's Field, Yakataga, Mendenhall Wetlands and McNeil River. The sixteen State critical habitat areas include Egegik, Pilot Point, Cinder River, Port Heiden, Port Moller, Tugidak Island, Kalgin Island, Redoubt Bay, Willow Mountain, Clam Gulch, Anchor River and Fritz Creek, Fox River Flats, Kachemak Bay, Copper River Delta, Dude Creek and Chilkat River. Areal maps and specific information may be obtained by contacting the Alaska Department of Fish and Game at its headquarters or regional offices (ADFG 1991).

    b. Waters within one (1) nautical mile of the boundary of a National Park, Monument or Preserve or within any bay, fjord or harbor enclosed by a National Park, Monument or Preserve are excluded from coverage by the Permit.

        Congressional mandates and Presidential proclamations have provided that federal parks, monuments and preserves be maintained to provide the scenic beauty and quality of landscapes in their natural state, to protect environmental integrity and habitat for and populations of fish and wildlife, including marine mammals, seabirds and waterfowl, and to provide continued opportunities for wilderness recreational activities [16 U.S.C. § 1 et seq.]. Of the national parks, monuments and preserves in Alaska, only four coastal units

(Aniakchak, Glacier Bay, Katmai and Kenai Fjords) are proximal to commercial fisheries.

c. Waters within one (1) nautical mile of the boundary of a National Wildlife Refuge are excluded from coverage by the Permit unless an applicant has obtained written authorization to discharge fish processing waste and other refuse to these waters from the Regional Director of the U.S. Fish and Wildlife Service (USFWS).

National Wildlife Refuges are maintained to protect environmental integrity and populations of fish and wildlife and their habitats, as well as to provide the scenic beauty and quality of landscapes in their natural state and opportunities for wilderness recreational activities [16 U.S.C. § 661 et seq.]. Of the national wildlife refuges in Alaska, six coastal units (Alaska Maritime, Alaska Peninsula, Kenai, Kodiak, Togiak and Yukon Delta) are proximal to commercial fisheries.

d. Waters within three (3) nautical miles of a rookery or major haulout of the Steller sea lion are excluded from coverage by the Permit. These areas are designated by the National Marine Fisheries Service (NMFS) as critical habitat for the Steller sea lion, a "threatened species," pursuant to the Endangered Species Act [ESA, 16 U.S.C. § 1531 et seq.]. They are listed and depicted in 50 CFR Part 226 and § 227.12, the "Seafood ODCE" and "Biological evaluation" (EPA and Tetra Tech 1994a, 1994b).

Pinniped rookeries and haulouts are vulnerable to disturbance and degradation by seafood processor discharges and should be protected [Marine Mammal Protection Act, 16 U.S.C. § 1361 et seq.; 50 CFR § 226]. Rookeries are unique habitats where pinnipeds mate, birth and raise their progeny on a consistent annual basis. Haulouts are areas used for rest and refuge by pinnipeds of all ages and both sexes during the non-breeding season and non-breeding adults and subadults during the breeding season (NMFS 1993; NOAA 1993, FR 58(165):45269-45285).

For regulatory purposes, the waterward boundary of rookeries and haulouts has been defined as MLLW. However, biologically, the boundaries are not easily delineated, for the surrounding nearshore waters are an integral component of these habitats, especially for foraging by post-parturient females and by young animals which are developing swimming and hunting behaviors. Conservation of

rookeries, haulouts and foraging areas appears essential to the maintenance of pinniped populations in general, and to the recovery of the "threatened" population of Steller sea lions in particular. Rookeries and major haulouts and adjacent marine waters to a minimum of three (3) nautical miles offshore have been designated as critical habitat for Steller sea lions [FR 58(165):45269-45285; 50 CFR Part 226 and § 227.12].

e. Waters within one (1) nautical mile of a nesting area of a colony of five thousand or more of the following seabirds during the period May 1 through September 30: puffins, auklets, eiders, murres, murrelets, petrels and kittiwakes are excluded from coverage by the Permit.

A rich scientific literature has considered the impacts of seafood waste discharges on the food supply, food web, community composition and interspecies dynamics of seabirds (EPA and Tetra Tech 1994a, 1994b). Seafood wastes as well as offal and garbage favor the expansion of large, opportunistic birds such as gulls to the detriment of smaller seabirds and waterfowl and their nestlings. Spectacled eider, Steller's eider, red-legged kittiwake, marbled murrelet and Kittlitz's murrelet are listed as endangered, threatned or species of concern in Alaskan waters.

f. River segments designated as wild or scenic under the Wild and Scenic Rivers Act [16 U.S.C. § 1271 et seq.] are excluded from coverage under the Permit. Congress has recognized that certain selected rivers possess outstandingly remarkable scenic, recreational, fish and wildlife and other values. Congress has futher declared that rivers designated as wild or scenic and their immediate environs shall be protected for the benefit and enjoyment of present and future generations.

2. At-risk resources and waterbodies.

a. Areas with water depth of less than ten (10) fathoms mean lower low water (MLLW) that are likely to have poor flushing, including but not limited to sheltered waterbodies such as bays, harbors, inlets, coves and lagoons and semi-enclosed water basins bordered by sills of less than ten (10) fathom depths are excluded from coverage under the Permit. For the purposes of this section, "poor flushing" means average water currents of less than one third of a knot within three hundred (300) feet of the outfall. Currents of one third knot and greater

offer significant dispersion and resuspension of seafood process waste residues (EPA and Tetra Tech 1994a).

b. Lost Harbor, Akun Island is excluded from coverage under the Permit. This harbor has a sill of twelve fathoms which restricts circulation in the enclosed basin of twenty-eight (28) fathoms. EPA has found that this waterbody has been degraded by seafood waste discharges and closed it to further discharges (Findley 1992).

c. Streams or rivers within one (1) statute mile upstream of a drinking water intake are excluded from coverage under the Permit. This exclusion ensures the protection of drinking water sources from contamination or pollution [18 AAC § 80.020].

d. Lakes or other impoundments of fresh water are excluded from coverage under the Permit. This exclusion protects aquatic habitat in Alaska's predominantly oligotrophic lakes as well as ensures the protection of drinking water sources [18 AAC § 80.020].

3. Degraded waterbodies.

a. Akutan Harbor west of longitude 165E46'00" W, Akutan Island, is excluded from coverage under the Permit. This exclusion acknowledges the waterbody's designation as "water quality limited" by seafood waste residues and its susceptibility to further, unreasonable degradation (ADEC 1992 et seq.).

b. Unalaska Bay south of latitude 53E57'30" N, Wide Bay, Broad Bay, Nateekin Bay, Iliuliuk Bay, Dutch Harbor, Iliuliuk Harbor and Captains Bay, Unalaska Island, are excluded from coverage under the Permit. This exclusion acknowledges south Unalaska Bay's designation as "water quality limited" by seafood waste residues and its susceptibility to further, unreasonable degradation (ADEC 1992 et seq.). It further recognizes that the contiguous waters of Captains Bay, Dutch Harbor, Iliuliuk Harbor and Iliuliuk Bay are impaired by seafood waste residues, sewage and petroleum products and are continuous with south Unalaska Bay. The "Circulation Study of Unalaska Bay and Contiguous Inshore Marine Waters" (CH2M Hill 1994) demonstrates the interconnected and interdependent nature of the Unalaska Bay watershed and water basin.

c. Any waterbody included in Alaska Department of Environmental Conservation's (ADEC) CWA § 305(b) report or CWA § 303(d) list of waters which are "impaired" by seafood processor discharges or "water quality-limited" for dissolved oxygen or residues (i.e., floating solids, debris, sludge, deposits, foam or scum) are excluded from coverage under the Permit. A technical basis has been developed that State water quality standards are exceeded in certain waterbodies. These waterbodies will not be subjected to the potential of additional environmental insult without site-specific water quality analyses.

4. Waters covered by other general NPDES permits. The Permit does not authorize the discharge of pollutants in areas covered by general NPDES permits AK-G52-7000 (Pribilof Islands) and AK-G52-8000 (City of Kodiak).

III. WHAT EFFLUENT LIMITATIONS ARE REQUIRED BY THE GENERAL PERMIT

A. General approach to determining effluent limitations

Sections 101, 301(b), 304, 308, 401 and 402 of the Act provide the basis for the effluent limitations and other conditions in the draft permit. EPA evaluates discharges with respect to these sections of the Act and the relevant NPDES regulations in determining which conditions to include in the permit.

In general, EPA first determines which technology-based limits apply to the discharges in accordance with the national effluent guidelines and standards (40 CFR § 408). EPA then determines which water quality-based limits apply to the discharges. The permit limits will reflect whichever limits (technology-based or water quality-based) are more stringent.

EPA must also include monitoring requirements in the permit to monitor compliance with effluent limitations. Ambient monitoring may also be required to gather data for future effluent limitations or monitor effluent impacts on receiving water quality and the integrity of the water resource.

The basis for each permit condition is described in more detail below.

B. Technology-based limitations

The Act requires particular categories of industrial dischargers to meet effluent limitations established by EPA. The Act initially focused on the control of "traditional" pollutants (conventional pollutants and some metals) through the use of Best Practicable Control Technology Currently Available

(BPT). Permits issued after March 31, 1989, must include any conditions necessary to ensure that the BPT level of control is achieved. BPT limitations are based on effluent guidelines developed by EPA for specific industries. Where EPA has not yet developed guidelines for a particular industry, permit conditions must be established using Best Professional Judgment (BPJ) procedures (40 CFR §§ 122.43, 122.44 and 125.3).

Section 301(b)(2) of the Act also requires further technology-based controls on effluents. After March 31, 1989, all permits are required by CWA §§ 301(b)(2) and 301(b)(3) to contain effluent limitations for all categories and classes of point sources which: (l) control toxic pollutants and nonconventional pollutants through the use of Best Available Technology Economically Achievable (BAT), and (2) represent Best Conventional Pollutant Control Technology (BCT). BCT effluent limitations apply to conventional pollutants (pH, BOD, oil and grease, suspended solids and fecal coliform). BAT applies to toxic and nonconventional pollutants. Toxic pollutants are those listed in 40 CFR § 401.15. Nonconventional pollutants include all pollutants not included in the toxic and conventional pollutant categories. In no case may BCT or BAT be less stringent than BPT. Like BPT requirements, BAT and BCT permit conditions must be established using BPJ procedures in the absence of effluent limitations guidelines for a particular industry.

1. Process and process-associated wastes

Alaskan seafood processors of fresh, frozen, canned and cured fish and shellfish are covered by the effluent guidelines and described in 40 CFR Part 408 for "remote" Alaskan locations. EPA evaluated seafood processors across the nation in the early 1970s in order to establish technology-based effluent limitations guidelines (EPA 1975). In consideration of the expense and logistical difficulties associated with much of Alaska, the technology-based limitations for Alaskan seafood processors in remote locations were limited to the requirement that no pollutants may be discharged which exceed 0.5 inch (1.27 cm) in any dimension. EPA's original determination applied more exacting limitations on seafood processors located in the cities of Anchorage, Cordova, Juneau, Ketchikan, Kodiak and Petersburg. The industry appealed this determination for Anchorage, Cordova, Juneau, Ketchikan, and Petersburg, and litigated the issue for nearly a decade. EPA suspended the application of non-remote limitation guidelines to Anchorage, Cordova, Juneau, Ketchikan and Petersburg in 1980 (EPA 1980a, FR 45(98):32675-32676); this suspension remains in effect today.

2. Sanitary wastewaters.

   The Permit requires that sanitary wastewaters shall be treated in wastewater treatment systems which comply with either Section 304(d) or 312 of the Act [40 CFR Part 133].

C. Water quality-based limitations

Section 301(b)(1) of the Act requires the establishment of limitations in permits necessary to meet water quality standards by July 1, 1977. All discharges to state waters must comply with state and local coastal management plans as well as with state water quality standards, including the state's antidegradation policy. Discharges to state waters must also comply with limitations imposed by the state as part of its coastal management program consistency determination and of its certification of NPDES permits under CWA § 401.

The NPDES regulations at 40 CFR § 122.44(d)(1) require that permits include limits on all pollutants or parameters which "are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality".

Toxicity limits are required whenever toxicity is at a level of concern relative to either a numeric or narrative standard for toxicity. A chemical-specific limit is required whenever an individual pollutant is at a level of concern relative to the numeric standard for that pollutant.

Alaska State Water Quality Standards (18 AAC Part 70) classify fresh waters as Classes (I)(A)(i-iv), (I)(B)(i-ii) and (I)(C) for use in drinking, culinary and food processing, agriculture, aquaculture, industrial water supply, water recreation, and the growth and propagation of fish, shellfish, aquatic life and wildlife. With few exceptions, rivers and lakes are designated for all beneficial uses and the most stringent of the water quality standards for these uses must be met.

Alaska State Water Quality Standards (18 AAC Part 70) marine and estuarine receiving waters as Classes (II)(A)(i-iii), (II)(B)(i-ii), (II)(C) and (II)(D) for use in aquaculture, seafood processing, water recreation, the growth and propagation of fish, shellfish, aquatic life and wildlife, and the harvesting for consumption of raw mollusks and other raw aquatic life. Marine and estuarine waters are designated for all beneficial uses and the most stringent of the water quality standards for these uses must be met.

Alaska State Water Quality Standards provide for the prescription of a mixing zone volume of dilution for an effluent which must be as small as practicable [18 AAC § 70.032]. The water quality criteria of 18 AAC § 70.020(b) and the antidegradation requirements of 18 AAC § 70.020(c) may be exceeded in an authorized mixing zone. However, the standards must be met at every point outside a mixing zone. A circular mixing zone of one hundred (100) feet radius is proposed for marine and estuarine discharges of dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine that are authorized under the Permit. A mixing zone of one hundred (100) feet downstream reach is proposed for fresh water discharges of dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine that are authorized under the Permit.

Alaska State Water Quality Standards also provide for the prescription of a zone of deposit of substances on the bottom of marine and estuarine waters which must be as small as practicable [18 AAC § 70.033]. The water quality criteria of 18 AAC § 70.020(b) and the antidegradation requirements of 18 AAC § 70.020(c) may be exceeded in an authorized zone of deposit. However, the standards must be met at every point outside a zone of deposit. A one acre (43,560 sq. ft.) zone of deposit is proposed for marine and estuarine discharges of settleable solid seafood processing waste residues that are authorized under the Permit. No zone of deposit is proposed for fresh water rivers or streams above tidally-influenced reaches.

The following discussions are also presented and expanded in the "Seafood ODCE" (EPA and Tetra Tech 1994a).

1. Biochemical oxygen demand (BOD). BOD affects the dissolved gases in the receiving water and may be limited by the applicable State water quality standard. Dissolved oxygen (D.O.) shall be greater than 7 mg/l in fresh waters used by fish and greater than or equal to 5 mg/l to a depth of 20 cm in the interstitial waters of gravel used by fish for spawning. D.O. shall be greater than or equal to 6 mg/l (coastal) or 5 mg/l (estuarine) for a depth of one meter, except when natural conditions cause this value to be depressed, and shall be greater than or equal to 5 mg/l at any point beneath the surface (in both coastal and estuarine waters). The Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity of dilution and dispersion. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit." Should a discharge contributed to a violation of the State's criteria for dissolved oxygen

in the receiving water, EPA has the authority to require a permittee to apply for and obtain an individual permit with site-specific requirements and conditions which would protect water quality.

2. Total suspended solids (TSS). TSS affects the residues in the receiving water and may be limited by the applicable State water quality standard. Residues of scum, solids, debris, sludge or deposits shall not alone or in combination with other substances or wastes cause the water to be unfit or unsafe, or cause leaching of toxic or deleterious substances, or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines. EPA finds that the residue standard requires the authorization of a mixing zone and a zone of deposit. The discharge should not cause a violation of the residue standard under the terms and conditions of the Permit. The Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity for dilution and dispersion and will monitor the sea surface, shoreline and seafloor periodically. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

3. Residues. As above, discharges of settleable solid seafoor processing waste residues is limited by the applicable State water quality standard. Residues of scum, solids, debris, sludge or deposits shall not alone or in combination with other substances or wastes cause the water to be unfit or unsafe, or cause leaching of toxic or deleterious substances, or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines. EPA finds that the residue standard requires the authorization of a mixing zone and a zone of deposit. The discharge should not cause a violation of the residue standard under the terms and conditions of the Permit. The Permit contains provisions that permittees will discharge effluents into hydrodynamically energetic waters with a high capacity for dilution and dispersion and will monitor the sea surface, shoreline and seafloor periodically. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

   The Permit limits shore-based or near-shore discharges of offal to no more than ten million pounds of settleable solid seafood processing waste residues per year. This effluent limit is based upon WASP modeling of the discharge, dispersion, settlement, accumulation and decomposition of fish

offal on the seafloor beneath and surrounding a discharge year, with a margin of safety equal to one-sixth of the estimated loading capacity. The WASP simulation of settleable solid seafood processing waste residues predicts that the continuing annual discharge of twelve million pounds of offal will produce as steady state waste pile of decomposing seafood that is one acre in area; the Surfer contouring model predicts that the waste pile will be just over four feet thick at its cone and will extend to an area of 1.2 acres (EPA and TetraTech 1994a, TetraTech 1996). Based upon the contouring model's predicted "spreading" at the periphery of the waste pile, EPA has determined that a one-sixth margin of safety is appropriate to protect water quality. The permit provides that the effluent limit for discharged settleable solids seafood processing wastes (a.k.a. offal) is equal to 5/6 X 12,000,000 = ten million pounds per year within one nautical mile of shore.

No limits on waste loads are proposed for discharges of settleable solid processing residues by offshore seafood processors discharging more than one nautical mile of shore.

4. Fecal coliform bacteria (FC). Median concentration shall not exceed 20 FC per 100 ml in fresh water nor exceed 14 FC per 100 ml in marine water. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

5. Oil and grease. The applicable State water quality standard for oil and grease states that the discharge shall not cause a film, sheen, or discoloration on the surface or floor of the waterbody or adjoining shorelines. Surface waters shall be virtually free from floating oils. Concentrations of animal fats shall not cause deleterious effects to aquatic life. Substances shall not be present or exceed concentrations which individually or in combination impart undesirable odor or taste to aquatic life as determined by either bioassay or organoleptic tests. The Permit proposes a specific limit of "no discharge of floating solids, visible foam or oily wastes which produce a sheen on the surface of the receiving water". EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit further proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

6. pH. The State water quality standard for freshwater requires that pH shall not be less than 6.5 or greater than 8.5, and shall not vary more than 0.5 pH unit from the natural conditions. In marine waters, pH shall be no less than 6.5 or greater than 8.5, and no more than 0.1 pH unit from natural conditions. Seafood processor discharges have a pH of approximately 6.6 to 7.0; this pH will be diluted in freshwater and diluted and buffered in marine water. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

7. Temperature. The State water quality standard for freshwater requires that temperature shall be no more than 13E C. The standard for marine water requires that temperature shall be no more than 15E C and shall not cause the weekly average temperature to increase more than 1E C. Normal daily temperature cycles shall not be altered in amplitude or frequency. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

8. Color. The State water quality standard for fresh and marine waters requires that the water not exceed 5 color units. There shall be no detrimental effects on established water supply treatment levels, nor interference with or making the water unfit or unsafe for the use. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

9. Turbidity. The State water quality standard for freshwater requires that the turbidity in the receiving water shall not be increased by more than 5 NTU when the natural turbidity is 50 NTU or less and not more than a 10 percent increase in turbidity when the natural condition is more than 50 NTU except that the maximum increase shall not exceed 15 NTU. The standard for marine water limits turbidity to no more than 25 NTU; it shall not reduce the depth of the compensation point for photosynthetic activity by more than 10%. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

10. Total residual chlorine (TRC). The State water quality standard requires that TRC shall be no more than 2 ug/l for salmonid fish and no more than 10 ug/l for other aquatic life. EPA estimates that a dilution of at least 30:1 will be achieved at the edge of the mixing zone and that the discharges will not exceed the applicable standard. The Permit proposes that "discharges shall not violate Alaska water quality standards at the edge of the mixing zone or outside the zone of deposit."

D. Summary of effluent limitations and requirements

The discharges of Alaskan seafood processors covered by the Permit will not result in a violation of the Alaska Water Quality Standards, provided that the permittee complies with the limits and conditions proposed in the draft general NPDES permit. The Permit requires that the permittee ensure that seafood waste discharges do not exceed one half inch (1.27 cm) in any dimension, a technology-based requirement commonly known as "grind and discharge." Domestic wastewater effluents must meet national standards for performance for sewage treatment. The Permit requires that the permittee comply with State Water Quality Standards for discharges of dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine at the edge of a 100 ft mixing zone. The Permit further limits discharges of settleable solid seafoor processing waste residues to ten million pounds per year and requires compliance with the water quality standard for settleable solid seafood processing residues outside of a one acre zone of deposit.

IV. BEST MANAGEMENT PRACTICES - WHAT, WHY, HOW AND WHEN

It is the national policy that, whenever feasible, pollution should be prevented or reduced at the source, that pollution which cannot be prevented should be recycled in an environmentally safe manner, that pollution which cannot be prevented or recycled should be treated in an environmentally safe manner, and that disposal or release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner [Pollution Prevention Act of 1990, 42 U.S.C. § 13101 et seq.].

The permittee will discharge at the facility in accordance with best management practices which address the provisions of the Pollution Prevention Act.

Best Management Practices (BMPs), in addition to numerical effluent limitations, may be required to control or abate the discharge of pollutants in accordance with 40 CFR § 122.44(k). In EPA's reassessment of the effluent limitations guidelines for seafood

processors (Jordan 1979; EPA 1980b), in-plant management directed towards total utilization of the raw materials and by-product recovery was recommended as a fundamental and central element of waste reduction. In-plant management of water and materials was found to be central in the waste management efforts in Europe (NovaTec Consultants 1993) and the United States (PPRC 1993). Materials accounting, audits of in-plant utilization of water and materials, and best management practices were repeatedly recommended as the profitable approach to waste management in seafood processing plants at the "Wastewater Technology Conference and Exhibition for Seafood Processors" convened by the Fisheries Council of British Columbia in Vancouver, Canada in February 1994 (e.g., Ismond 1994, Drew 1994, Carlson 1994, Johnson 1994, et al.).

The Permit requires the development and implementation of Best Management Practices which prevent or minimize the generation and release of pollutants to receiving waters. Seafood processors operating and discharging more than one (1) nautical mile from shore are required to implement BMPs which minimize process waste solids and disperse process wastes through mobility. Seafood processors operating and discharging one (1) nautical mile or less from shore are required to develop a BMP Plan which focuses upon the minimization of process waste solids.

The Permit requires than a permittee develop and implement BMPs. A new permittee shall develop and implement a BMP Plan within six (6) months of the date of that permittee's authorization to discharge under this Permit. A continuing permittee shall review the BMP Plan and resubmit certification with the NOI that the BMP Plan has been reviewed and revised as needed.

EPA has developed a general handbook to assist industry in identifying and utilizing BMPs and in developing and implementing materials accounting and BMP Plans (EPA 1993). EPA has developed an industry-specific handbook to assist seafood processors in identifying and utilizing BMPs and in developing and implementing materials accounting and BMP Plans (EPA and Bottomline Performance 1994).

The BMP Plan must be amended whenever there is a change in the facility or in the operation of the facility which materially increases the potential for an increased discharge of pollutants.

V. WHAT MONITORING IS REQUIRED BY THE GENERAL PERMIT

An environmental monitoring program is required to assess the near-field effects of seafood processor the discharges on the water surface, shoreline and seafloor. Monitoring will be conducted periodically in accordance with the perceived risk of a violation of Alaska State Water Quality Standards or an impact on the receiving water

resources. In accordance with the recommendations of the National Research Council (NRC 1990), the permit provides goals, objectives and evaluative criteria for the environmental monitoring program during the term of the Permit.

VI. OTHER REQUIREMENTS

A. New source performance standards (NSPS)

Pursuant to CWA § 301, NSPS were promulgated for Alaskan seafood processors [40 CFR Part 408]. NSPS apply to new seafood processors determined to be new sources by virtue of their activities occurring after promulgation of the rule (Dec. 1, 1975). The NSPS for Alaskan seafood processors are based on the same treatment technology as BAT, which consists of the "grind and discharge" provisions described above. Since BAT is based on the most stringent demonstrated technology that is available for treating seafood processor wastes, those processors which are new sources will not be subject to controls more stringent than those applicable to existing seafood processors.

B. National Environmental Policy Act [42 U.S.C. § 4321 et seq.]

The National Environmental Policy Act (NEPA) may require the preparation of an Environmental Impact Statement and consideration of EIS-related permit conditions as provided in 40 CFR § 122.29(c) and 40 CFR Part 6 subpart F [40 CFR § 122.49(g)]. In accordance with these regulations, EPA prepared an Environmental Assessment and determined that the issuance of the general NPDES permit for Alaskan seafood processors would not significantly affect the quality of the human environment within the context of NEPA (EPA 1983, 1994b; EPA and Tetra Tech 1994a).

Pursuant to CWA § 301, new source performance standards were promulgated by EPA in 1975 for categories of discharges covered under the Permit. In accordance with CWA § 511(c)(1), NPDES permits for new sources are subject to the provisions of NEPA. An assessment of potentially significant impacts on the quality of the human environment resulting from operation of a new source is required under NEPA.

Any applicant planning to construct a facility, or to convert a facility not previously permitted and to discharge pollutants regulated under NPDES shall be required to prepare an Environmental Information Document (EID) for use by EPA Region 10. EPA will use the EID to prepare an Environmental Assessment to make a determination of impact in compliance with the National Environmental

Protection Act (NEPA). Guidance for preparing the EID can be obtained by contacting the NEPA Compliance Officer in EPA's Office of Water.

Finding of No Significant Impact (FNSI). In compliance with EPA headquarter's guidance for re-issued NPDES permits, the EPA Region 10 NEPA Compliance Program has evaluated the proposed changes to general NPDES permit AK-G52-0000 and balanced the need to re-evaluate the NEPA analysis of preceding NPDES permits for Alaskan seafood processors. EPA Region 10 has determined that the previous Environmental Assessment for seafood processors prepared in July 1994 does not need to be amended with a new NEPA analysis, as the proposed permit conditions for the re-issued NPDES general permit are not significantly different from the previous permit.

C. Coastal Zone Management Act [16 U.S.C. § 1451 et seq.]

The Coastal Zone Management Act and its implementing regulations [15 CFR Part 930] prohibit EPA from issuing a permit for an activity affecting land or water use in the coastal zone until the applicant certifies that the proposed activity complies with the State Coastal Zone Management program, and the State or its designated agency concurs with the certification [40 CFR § 122.49(d)]. EPA has considered Coastal Zone Management Plans obtained from this State office and individual Coastal Zone Management districts in the "Seafood ODCE" and determined that the Permit will comply with the State Coastal Zone Management Program (EPA and Tetra Tech 1994a). EPA has submitted the Permit to the State of Alaska, Office of the Governor, Division of Governmental Coordination, to ensure that the Permit complies with the State Coastal Zone Management Program.

D. Ocean Discharge Criteria

The Ocean Discharge Criteria establish guidelines for permitting discharges into the territorial seas, the contiguous zone and the ocean. EPA conducts an Ocean Discharge Criteria Evaluation, or "ODCE," using criteria established in accordance with CWA § 403. EPA decides on the basis of available information whether or not the discharge will cause unreasonable degradation of the marine environment. 40 CFR § 125.121 states "unreasonable degradation of the marine environment" means:

1. Significant adverse changes in ecosystem diversity, productivity, and stability of the biological community within the area of discharge and surrounding biological communities;

2. Threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms; or

3. Loss of aesthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

CWA § 403(c) guidelines require that a number of factors be considered in the determination of unreasonable degradation or irreparable harm. These factors include the amount and nature of the pollutants, the potential transport of the pollutants, the character and uses of the receiving water and its biological communities, the existence of special aquatic sites (including parks, refuges, etc.), any applicable requirements of an approved Coastal Zone Management plan, and potential impacts on water quality, ecological health and human health.

After consideration of these factors, EPA has determined that discharges authorized by the Permit and discharged in accordance with the requirements of the Permit will not cause unreasonable degradation of the receiving waters.

Because the discharge consists largely of conventional pollutants in manageable quantities and the areas covered under the Permit are not considered sensitive or unique, unreasonable degradation is not anticipated. Studies of areas severely impacted by seafood processing waste discharges, like Kodiak Harbor, have shown that recovery can occur if proper treatment is implemented and the permit conditions are met; there is no irreparable harm.

Discharges to water resources which are protected, special, at-risk or impaired are not authorized under the Permit. EPA guidance (EPA 1994a) finds that in areas that do not contain sensitive species or unusual biological communities, it may be concluded that discharges containing primarily conventional pollutants and in compliance with permit conditions will not cause unreasonable degradation. The guidance further finds this is especially appropriate where the data indicate that there will be significant mixing with the receiving waters based on the flow of the discharge (i.e. water depth, turbulence). The processing operations covered under the Permit will continue to have little environmental effect, providing appropriate grinding is implemented.

The ODCE guidelines establish a presumption that discharges in compliance with State Water Quality Standards will not cause unreasonable degradation with respect to the pollutants subject to these sections. In general, degradation occurs in processing areas where poor or minimal flushing exists or the cumulative discharges of seafood processors exceed the assimilative capacity of the receiving water. In order to protect water quality, many of the large

processors and significant processing areas have been covered under individual permits that contain requirements more stringent than those in the general NPDES permit. These facilities will continue to be regulated under individual NPDES permits.

E. Endangered Species Act [16 U.S.C. § 1531 et al.]

The Endangered Species Act (ESA) and its implementing regulations [50 CFR Part 402] require EPA to ensure, in consultation with the Secretary of the Interior or Commerce, that any action authorized by EPA is not likely to jeopardize the continued existence of any endangered or threatened species or adversely affect its critical habitat [40 CFR § 122.49(c)].

A list of endangered and threatened species and species of concern was provided to EPA by the NMFS and USFWS for the State of Alaska. EPA prepared a biological evaluation as required by ESA.

In the case of the "threatened" Steller sea lion, major haulouts as well as rookeries and adjacent nearshore waters have been designated as "critical habitats". The Permit does not authorize discharges within three nautical miles of rookeries and major haulouts designated as critical habitats by NMFS, the responsible agency.

In the case of the spectacled eider, Steller's eider, red-legged kittiwake, marbled murrelet and Kittlitz's murrelet, critical habitats have not been designated. However, a review of the scientific literature indicates that these and other birds are particularly vulnerable during the nesting period in rookeries (EPA and Tetra Tech 1994a). The Permit does not authorize discharges within one nautical mile of rookeries occupied by five thousand or more seabirds and waterfowl. The Permit prohibits the discharge of petroleum hydrocarbons and any hazardous or toxic materials. The Permit authorizes discharges of seafood processing wastes and prohibits the discharges of petroleum hydrocarbons and any hazardous or toxic materials.

EPA has evaluated other species designated as endangered or threatened and found that the discharges authorized by the Permit will not affect them (EPA and Tetra Tech 1994b).

EPA informally consulted with NMFS and USFWS. The recommended protection measures for the species of concern prohibit alterations of limited, high quality habitat occupied and utilized during mating, birthing and raising young from discharges of pollutants by Alaskan seafood processors. EPA has concluded

that the discharges authorized by the Permit are not likely to have an effect on any endangered or threatened species or its critical habitat.

EPA is requesting concurrence from NMFS and USFWS on the draft permit and will consider their comments in the final permit decision. EPA will initiate consultation should new information reveal effects not previously considered, should the activities be modified in a manner beyond the scope of the original opinion, or should the activities affect a newly listed species.

F. Marine Mammal Protection Act [16 U.S.C. § 1361 et seq.]

Section 2 of the Marine Mammal Protection Act finds that marine mammals are resources of great international significance, aesthetic, recreational and economic, and should be protected, conserved and encouraged to develop optimum populations. In particular, efforts should be made to protect the rookeries, mating grounds and areas of similar significance for each species of marine mammal from the adverse effect of man's actions. With the exception of subsistence use for Alaskan natives, a moratorium has been placed on the taking (harass or kill) marine mammals in Alaska.

The Permit provides for "buffer zones" around the rookeries and haulouts of Steller sea lions, northern fur seals and walruses. These protected water resources and special habitats are excluded from coverage under the Permit.

G. **Magnuson-Stevens Fishery Management and Conservation Act** [U.S.C. § et al.]

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act set forth a number of new mandates for the National Marine Fisheries Service (NMFS), regional fishery management councils, and other federal agencies to identify and protect important marine and anadromous fish habitat. The Councils, with assistance from NMFS, are required to delineate “essential fish habitat” (EFH) for all managed species. Federal action agencies that may adversely impact EFH are required to consult with NMFS regarding the potential effects of their actions on EFH, and respond in writing to the fisheries service’s recommendations. The EFH regulations define an *adverse effect* as “any impact which reduces quality and/or quantity of EFH...[and] may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species’ fecundity), site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions”. NMFS or a Council may recommend measures for attachment to the federal action to protect EFH; such recommendations are advisory, not proscriptive, in nature.

EPA has tentatively determined that the issuance of this permit will cause minimal effects upon EFH species and habitat in the vicinity of seafood processor discharges of processing wastewater and waste solids. The water quality parameters dissolved oxygen, floating and suspended waste residues, color, turbidity, temperature, pH, fecal coliform bacteria, and total residual chlorine may exceed Alaska Water Quality Standards within the State-authorized 100 ft mixing zone. Settleable solid seafood processing waste residues may accumulate as waste piles on the seafloor within the State-authorized one acre zone of deposit. EPA requests that NMFS issue a "general concurrence" for this Permit re-issuance.

A general concurrence identifies specific types of Federal actions that may adversely affect EFH, but for which no further consultation will generally be required. In order to issue a general concurrence, NMFS must determine, after coordinating with the appropriate Fishery Management Council(s) and reviewing public comment, that the actions are (1) similar in nature and similar in their impact on EFH, (2) do not cause greater than minimal adverse effects on EFH when implemented individually, and (3) do not cause greater than minimal cumulative adverse effects on EFH. NMFS requires (1) a written description of the nature and approximate number (annually or by some other appropriate time frame) of the proposed actions, (2) an analysis of the effects of the actions on EFH and associated species and their life history stages, including cumulative effects, and (3) the Federal agency's conclusions regarding the magnitude of such effects.

This fact sheet, the draft permit, and the "Seafood ODCE" (EPA and Tetra Tech 1994a) have been submitted to NMFS for review prior to the public notice period. Additional information will be provided to NMFS as needed during the consultation. Any recommendations received from NMFS regarding EFH will be considered for incorporation into this Permit prior to final issuance of the Permit.

If NMFS, after coordinating with the appropriate Fishery Management Council(s), determines that a General Concurrence is appropriate, it will provide EPA with a written statement that further consultation is not required for the permitting activities specified in the General Concurrence.

H. Wild and Scenic Rivers Act [16 U.S.C. § 1273 et seq.]

Section 1 of the Wild and Scenic Rivers Act declares that rivers designated as wild or scenic and their immediate environs shall be protected for the benefit and enjoyment of present and future generations. The Permit excludes Alaskan river reaches designated as "wild" or "scenic" from coverage under the Permit.

I. State certification of the Permit

Section 301(b)(1)(C) of the Clean Water Act requires that an NPDES permit contain conditions which ensure compliance with applicable State water quality standards or limitations. The limitations for residues and other pollutants were established pursuant to Alaska State Water Quality Standards. Section 401 of the Act requires that states certify that federally issued permits are in compliance with state law. No permits can be issued until the requirements of CWA § 401 are satisfied.

These are permits for operations discharging to surface waters of the State of Alaska and the United States of America. EPA is requesting State officials to review and provide appropriate certification to this draft general NPDES permit pursuant to 40 CFR § 124.53.

Since State waters are involved in the draft permit, the provisions of Section 401 of the Act apply. Furthermore, in accordance with 40 CRF §124.10(c)(1), public notice of the Permit has been provided to the State of Alaska and State agencies having jurisdiction over fish, shellfish and wildlife resources, and over coastal zone management plans.

J. Presidential oversight of federal regulations [Executive Order 12866]

The Office of Management and Budget has exempted this action from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order.

K. Paperwork Reduction Act [44 U.S.C. § 3501 et seq.]

EPA has reviewed the requirements imposed on regulated facilities in the Permit under the Paperwork Reduction Act. Most of the information collection requirements have already been approved by the Office of Management and Budget (OMB) in submissions made for the NPDES permit program and the previous general NPDES permit for seafood processors in Alaska. EPA has submitted the Permit's requirements for the NOI, waivers, BMP plans, annual reports and monitoring reports to OMB for review and approval.

L. The Regulatory Flexibility Act [5 U.S.C. § 553 et seq.]

After review of the facts presented in the notice of intent, draft permit and fact sheet, the Administrator of EPA certifies, pursuant to the provisions of 5 U.S.C. §605(b), that this general NPDES permit will not have a significant impact on a

substantial number of small entities. Moreover, the Permit reduces a significant administrative burden on regulated sources.

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